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Weather

WEATHER SUPPORT

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This instruction implements Air Force Policy Directive (AFPD) 15-1, *Weather Operations,* Air Force Strategic Plan on Weather Reengineering, Air Force Instruction (AFI) 10-206, *Operational Reporting*, AFI 10-229, *Responding to Severe Weather Events*, AFI 15-114, *Functional Resource and Weather Technical Performance Evaluation*, AFI 15-128, *Air Force Weather Roles and Responsibilities*, AFI 10-2501, Air Force Emergency Management Program, Air Force Manual (AFMAN) 15-111, *Surface Weather Observations*, AFMAN 15-124, *Meteorological Codes*, AFMAN 15-129V1, *Air and Space Weather Operations - Characterization,* AFMAN 15-129V2, *Air and Space Weather Operations - Exploitation*. It identifies the specific support services and related responsibilities performed by the 75th Operations Support Squadron Weather Flight (75 OSS/OSW), for the 75th Air Base Wing (75 ABW), associated units, and other agencies associated with Hill Air Force Base (AFB), Utah and outlines the responsibilities of supported organizations. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through the appropriate functional chain of command. The authorities to waive wing and unit level requirements in this publication are identified with a Tier ("T-0, T-1, T-2, T-3") number following the compliance statement. See AFI 33-360, *Publications and Forms Management*, Table 1.1 for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the publication OPR for non-tiered compliance items. Ensure records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) AFMAN 33-363, *Management of Records*, and disposed of IAW Air Force Records Disposition Schedule (RDS) located in the Air Force Records Information Management System (AFRIMS).

SUMMARY OF CHANGES

This document has been significantly changed and should be reviewed in its entirety. Formatting for this instruction has been adjusted from previous versions to reflect the most recent Air Force weather guidance found in AFMAN 15-129V2, *Air and Space Weather Operations – Exploitation, and* AFMAN 15-111, *Surface Weather Observations*. A new Heavy Snow Warning has been added and Special Weather Report (SPECI) criteria for Runway Visual Range (RVR) and Tower Visibility have been revised. F-35 support criteria have been added to include flight restrictions and crosswind advisories to reflect customer guidance.

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Chapter 1

WEATHER STATION OPERATIONS

1.1. General. The 75 OSS/OSW is organized, trained, and equipped to provide detailed weather information for customers aligned under 75 ABW, 388th and 419th Fighter Wings (FW), Ogden Air Logistics Complex (OO-ALC), and Team Hill Tenant organizations located on Hill AFB, Utah. The 75 OSS/OSW provides the following timely, accurate, and relevant weather products; surface weather observations; weather watches, warnings and advisories; tactical level weather products; in-flight pilot to forecaster service support; and flight weather briefings. As the focal point for installation weather-related issues, the 75 OSS/OSW located on the north side of Building 1, is commonly referred to as the Weather Flight (WF).

1.2. Operating Hours. Staff services are available from 0800L to 1700L, Monday through Friday, except federal holidays and family days. Airfield Services are in conjunction with airfield operating hours; Mission Services are provided in conjunction with the local flying schedule. The 75 OSS/OSW can be contacted at DSN 777-2018, 2063, 3519, 3629, or commercial (801) 777-2018. During times of airfield closure, the 25th Operational Weather Squadron (25 OWS), the regional weather hub at Davis Monthan AFB, assumes meteorological watch (METWATCH) responsibilities for Hill AFB. The Lead Meteorologist at the 25 OWS can be reached at DSN 228-7655 or commercial (520) 228-7655. General responsibilities of the 75 OSS/OSW and the 25 OWS are outlined in AFI 15-128, or on our Installation Data Page (IDP) located at the following URL: **https://25ows.us.af.mil/ows_unique/25data/moa/Hill_AFB_Data_Page.pdf**. The 75 OSS/OSW maintains a standby forecaster during times of WF closure. See **Attachment 7** for more information about WF standby procedures.

1.3. Duty Priorities. The 75 OSS/OSW duty priorities are listed in Table 1.1. Requests for changes to these duty priorities must be submitted to the Weather Flight Commander (WFC) at DSN 777-3629.

Table 1.1. 75 OSS/OSW Duty Priority Listing.

Priority	Duties
1	Perform Emergency War Order Taskings.
2	Execute WF evacuation.
3	Respond to Aircraft/Ground emergencies.
4	Respond to Pilot-to-Metro Service (PMSV) Contacts.
5	Provide Weather Information for Supervisor of Flying (SOF).
6	Issue/Coordinate Watches, Warnings and Advisories (WWAs).
7	Severe Weather Action Procedures (SWAP) Operations.
8	Augment Automated Meteorological Observing System (AMOS) Observations for Mandatory Elements.
9	Disseminate Urgent Pilot Reports (PIREPs).
10	Mission Execution Forecast Process (MEFP) – Produce and Disseminate Forecasts.
11	Provide "Eyes Forward" / Collaborate with 25 OWS.
12	Transmit Surface Observations and Disseminate Routine PIREPs.
13	Perform MISSIONWATCH.
14	Provide Staff Weather Briefings.
15	Provide Other Weather Products, Information and Weather Briefings.
16	Weather Functional Training.
17	Accomplish Administrative Tasks.

1.4. Release of Weather Information. Operations and communications security is considered prior to any release of weather information. Specific restrictions do not exist on the dissemination of weather information to other military agencies. Information exchange between the 75 OSS/OSW and the local National Weather Service (NWS) office is encouraged in the interest of public safety and resource protection. Routine working agreements from either agency is maintained in writing. Support to other non-military agencies, foreign governments, or individuals, is coordinated with Public Affairs before service or information is provided. The 75 ABW Public Affairs office approves direct media requests for weather information. This restriction does not include indirect routine weather information, which is passed on automated weather circuits or information passed through the NWS in the interest of public safety.

1.5. Continuity of Operations (COOP). Both the observing and forecasting services relocate to an Alternate Operating Location (AOL) in the event of an emergency affecting Building 1. The weather technician does not relocate for exercises unless qualified personnel are available to man the weather station during his or her absence. The back-up weather station is the Air Traffic Control Simulator, Building 10A at DSN 775-3127/3120. When evacuated, the weather technician notifies Hill Command Post (HCP) the 75 OSS/OSW is relocating to the AOL. Alternate weather technician equipment is kept in the base weather station and available for immediate relocation.

1.5.1. Observing and Forecasting Services. Limited weather observations and other weather products are produced at the AOL and provided to the Air Traffic Control (ATC) Tower. ATC relays important information to Clover Control. Observations will include at a minimum wind speed and direction, prevailing visibility, present weather and obscurations, sky condition, temperature, dew point, and altimeter setting. WWAs and weather observations are disseminated by the JET. If JET is inoperable, observations and WWAs are disseminated by telephone, beginning with ATC.

1.5.2. Flight Weather Briefings. Due to limited access to weather information, flight crews are instructed to contact the 25 OWS at Davis-Monthan AFB, AZ for support until adequate forecast and observing service is restored at the Hill AFB weather station.

1.6. SWAP. (AFMAN 15-129V2 *Air and Space Weather Operations – Exploitation* paragraph 2.19.) The 25 OWS and the 75 OSS/OSW are responsible for disseminating WWAs and providing weather expertise to aid in the protection of Hill AFB resources at risk to severe weather conditions. These procedures are designed to facilitate Hill AFB risk management practices by recalling weather personnel as needed to monitor severe weather conditions and take appropriate action to aid other base agencies in the protection of Hill AFB resources.

1.6.1. Severe Weather Conditions. Weather conditions of such intensity to be a hazard to life or property at Hill AFB are defined as tornadic activity (e.g., funnel cloud, water spout, or tornado), hail greater than or equal to ¾ inch, surface winds greater than or equal to 50 knots, snowfall of 6 inches or greater in 12 hours, and freezing precipitation.

1.6.2. Severe Weather Notification. Base agencies are notified of severe weather via two methods, JET and/or automated telephone call. Severe weather warnings are disseminated via JET first, with the exception of tornados, which is first telephoned to the HCP and then sent via JET. It is important that base agencies requiring notification of severe weather events monitor an active JET portal session for severe weather messages. See **Chapter 5** for JET portal access information.

1.6.3. 75 OSS WF Actions. In the event severe weather is imminent on Hill AFB, the 75 OSS WF acting as "Eyes Forward" coordinates with the 25 OWS to issue weather watches and warnings with an attempt to meet or exceed the desired lead times listed in **Attachment 6**. If hazard to life or property is immediate, the 75 OSS WF duty forecaster issues watches and warnings as necessary and briefs the 25 OWS as soon as practical. Notification to Hill AFB agencies is conducted per the notification matrices in **Attachment 8**.

1.6.4. Initiation of SWAP. During non-duty hours the 25 OWS notifies the WF standby forecaster anytime severe weather is forecasted. The standby forecaster must be able to report for duty within 45 minutes of being recalled. The WF duty forecaster determines, as conditions warrant, the need to recall additional personnel. See **Attachment 7** for more information.

1.6.5. SWAP Duty Priorities. In the event of a severe weather recall, 75 OSS WF duty priorities are directed toward protection of Hill AFB resources. Duties such as staff weather briefings, mission execution forecasts, and transient aircrew briefings may be delayed until the severe weather threat has diminished or until enough personnel arrive on duty to handle the tasks.

1.6.6. Post Severe Weather Procedures. The 75 OSS WF provides required data for an Operational Report-3 BEELINE message to the HCP.

1.7. Weather Internet Homepage. The weather flight maintains a web page limited to military users only. It is located at **https://org.eis.afmc.af.mil/sites/75OSS/OSW/default.aspx**. A wide variety of weather information is available from this site including daily updates to the 5-day weather outlook for Hill AFB. This information is for planning purposes only.

Chapter 2

AIRFIELD SUPPORT

2.1. Official Observing Location. WF observing services is primarily accomplished using the Fixed Meteorological Equipment (FMQ-19), an Automated Meteorological Observing System (AMOS). FMQ-19 sensors are located on the north end, south end, and center of the Hill AFB runway. In the event that FMQ-19 observations are augmented, manual weather observing services are provided from approximately 200 feet north of the base weather station located in Building 1. Observations are hampered at Hill AFB from a direction of 120 to 260 degrees from the observing location. This is due to visual obstructions caused by the location of Building 1 as well as multiple other base structures in reference to the official observation point located at ground level across from Building 1 next to the ATC Tower. Ceilings and visibility are frequently lower on the north end of the runway and east-southeast along the mountains.

2.2. Surface Weather Observations. The duty weather technician ensures dissemination of an official observation between 55 and 59 minutes after every hour. Weather observations at Hill AFB are taken IAW AFMAN 15-111, *Surface Weather Observations.* The following are the elements observed by the 75 OSS/OSW and disseminated long line for use by various agencies; time, wind speed, and direction; prevailing visibility; runway visual range (RVR); weather and obstruction to vision; sky condition; temperature; dew point; altimeter setting; sea-level pressure; and a remarks section to present a more precise picture of existing weather conditions. **Table 2.1.** describes common weather phenomena and how it is encoded in weather observations.

Table 2.1. Common Phenomena and Observing Code.

QUALIFIER		**WEATHER PHENOMENA**		
INTENSITY OR PROXIMITY 1	**DESCRIPTOR 2**	**PRECIPITATION 3**	**OBSCURATION 4**	**OTHER 5**
- Light	**MI S**hallow	**DZ** Drizzle	**BR** Mist	**PO** Well-Developed Dust/Sand Whirls
Moderate	**PR** Partial	**RA** Rain	**FG** Fog	**SQ** Squalls
+ Heavy	**BC** Patches	**SN** Snow	**FU** Smoke	**FC** Funnel Cloud(s) (Tornado, or Waterspout)
VC - In the Vicinity	**DR** Low Drifting	**SG** Snow Grains	**VA** Volcanic Ash	**SS** Sandstorm
	BL Blowing	**IC** Ice Crystals	**DU** Widespread Dust	**DS** Dust storm
	SH Shower(s)	**PL** Ice Pellets	**SA** Sand	**UP** Unknown Precipitation
	TS Thunderstorm	**GR** Hail	**HZ** Haze	
	FZ Freezing	**GS** Small Hail and/or Snow Pellets	**PY** Spray	

2.3. Types of Observations . The FMQ-19 or duty WF makes two types of weather observations. Observations are sent to local base agencies using JET as well as to the Automated Weather Network for world-wide military and civilian use. In the event of a JET outage, observations are passed to the ATC tower via telephone to ensure flight safety.

2.3.1. Aviation Routine Weather Report (METAR). METAR observations are created between 45 and 59 minutes after every hour and disseminated locally and long-line between 55 and 59 minutes after the hour.

2.3.2. Aviation Selected Special Weather Report (SPECI). SPECI is an unscheduled observation completed and transmitted when any of the Hill AFB special criteria listed in **Attachment 2** are observed or sensed. The SPECI contains all data elements found in a METAR plus additional remarks that elaborates on data in the body of the report. SPECI reports are prepared and transmitted as soon as possible after the relevant criteria are observed.

2.4. Weather Observation Augmentation. The FMQ-19 has the capability to automatically transmit observations rapidly to keep up with current weather conditions, but occasionally requires human augmentation due to certain weather criteria. The two augmentation processes used are supplementing and back-up. In all instances of human augmentation, flight safety is the highest priority.

2.4.1. Supplementing. Supplementing is manually adding meteorological information to an observation generated by the FMQ-19 beyond that system's capability to measure and report. For example, the sensor cannot sense a tornado or hail. WF personnel supplement observations when the airfield is open and the weather conditions in **Table 2.2.** are observed. Weather personnel are required to log on to an AMOS and be prepared to supplement whenever a watch or warning is issued for tornadic activity.

Table 2.2. Mandatory Supplement Weather Criteria for Hill AFB.

Tornado (+FC)
Funnel Cloud (FC)
Water Spout (+FC)
Hail (GR) ≥ ½ and encoded in ¼ inch increments
Volcanic Ash (VA)
Ice Pellets (IP)
Snow Depth
Ceiling ≤ 10,000ft and/or visibility ≤ 5 miles (during airfield hours only)
Mission Impacting Cloud Layers Over the Runway (during airfield hours only)
Midfield Wind Remarks (during airfield hours only)

2.4.2. Back-up. Back-up is the process of manually providing meteorological data or dissemination of an FMQ-19 generated observation when the primary automated method is

not operational or unavailable due to sensor or communication failure. During equipment failures, back-up procedures are taken IAW local procedures and AFMAN 15-129V2.

2.5. Basic Weather Watch (BWW). The FMQ-19 performs an automatic Continuous Weather Watch. During augmentation, the technician evaluates the need to take SPECI observations intervals not to exceed 20 minutes.

2.6. Cooperative Weather Watch (CWW). To augment the BWW, ATC personnel and other appropriate base agencies (e.g., Security Forces) conduct a CWW to provide additional weather information to the WF when significant and unreported weather phenomena are detected. Of primary concern is the report of tower visibility differing from the prevailing surface visibility, reporting of sector visibility, local PIREPs and occurrences of previously unreported weather conditions affecting flight safety or be critical to the safety or efficiency of other local operations and resources. ATC personnel certified to evaluate tower visibility report changes in tower prevailing visibility to the 75 OSS weather technician when prevailing visibility reading is less than 4 miles (6000 meters) and tower visibility is different from the surface prevailing visibility by a reportable value. The 75 OSS includes the tower visibility as a remark at the end of the observation.

2.7. Terminal Aerodrome Forecast (TAF) Support. The 25 OWS produces and disseminates TAFs for Hill AFB IAW AFMAN 15-129V1, AFMAN 15-124, *Meteorological Codes* and the Hill AFB Installation Data Page (found on the 25 OWS webpage at **https://25ows.us.af.mil/ows_unique/25data/moa/Hill_AFB_Data_Page.pdf**). The primary means for dissemination of the TAF and TAF amendments by the 25 OWS is via JET. The elements included are time, wind direction, wind speed, visibility, obstruction to vision, sky cover, cloud height, icing, turbulence, minimum altimeter, and significant remarks. If JET is inoperative, the 75 OSS weather technicians disseminate forecast elements to ATC tower by telephone. ATC personnel relay TAF updates to Clover Control. TAFs are valid for 30 hours and apply to the area within 5 nautical miles (NM) of the center of the Hill AFB airfield complex. TAFs are issued at 0500Z, 1300Z, and 2100Z. The 25 OWS performs all METWATCH for Hill AFB. In the event that the 25 OWS is unable to provide weather support to Hill AFB due to unforeseen events (i.e., evacuation or communication outages), the 75 OSS/OSW assumes full weather support responsibility for Hill AFB and the Utah Test and Training Range (UTTR).

2.8. Pilot-to-Metro-Service (PMSV). The 75 OWS/OSW operates a PMSV radio to provide updated weather information to airborne aircrews and to receive PIREPs. The Ultra High Frequency (UHF) channel 342.3 MHz is continually monitored by the 75 OSS/OSW during operating hours. Due to obstructing terrain, the PMSV is unusable from 010 to 100 degrees beyond 20 NM below 20,000 feet Mean Sea Level (MSL) and from 100 to 150 degrees beyond 25 NM below 15,000 feet MSL. Aircrews should relay PIREPs of weather conditions encountered during takeoff, climb-out, approach, landing, and on the ranges when practical. The PIREPs can be passed directly to the 75 OSS weather technicians via the PMSV, to ATC personnel or the SOF. The ATC personnel or SOF passes the PIREP on to the weather station, time permitting. The 75 OSS weather technicians disseminates PIREPs locally when weather conditions in the terminal area or the UTTR are significantly different from those briefed or previously forecasted or when the conditions could impact the safety of flight operations. These conditions include, but are not limited to, low-level wind shear below 2,000 feet above ground

level (AGL), icing of any type or intensity, moderate or greater turbulence, or any other significant weather phenomena reported.

2.9. Resource Protection (RP) Support & WWAs. Weather conditions must be monitored for resource protection. This is accomplished through a shared effort between 25 OWS and 75 OSS/OSW. The 25 OWS is responsible for issuing forecast WWAs for Hill AFB. 75 OSS/OSW is responsible for issuing observed warnings and advisories. However, if hazard to life or property is immediate, or in circumstances where 25 OWS is unable to issue products, the 75 OSS/OSW issues required forecast warnings. In these cases, 75 OSS/OSW briefs 25 OWS as soon as time permits. WWAs are disseminated via JET first with the exception of tornadoes, which are first telephoned to the HCP and then sent via JET. The Weather Flight, HCP and MOCs are notified by an automated phone call via JET. If you do not receive the automated phone call, contact the 25OWS forecaster to determine if there are any JET outages. Tower, SOF and Airfield Management Operations are notified by an audible alert through Information Display System 5 (IDS5). Ensure products are horizontally consistent. When JET is inoperative, WWAs are disseminated to JET users via telephone as listed in **Attachment 3**. WWAs apply to Hill AFB and the area within 5 NMs of the center of the runway unless otherwise specified. They are issued consistent with minimum desired lead time (DLT). The DLT is defined as the minimum amount of advance notice a supported customer requires to prepare for the onset of a particular weather phenomenon. Any on-base agency requiring specialized weather warning support not specified in this instruction must coordinate requirements through the WFC at DSN 777-3629.

2.9.1. Weather Advisory. Weather advisories are special notices to supported agencies that established weather conditions, for which they may have to take protective actions. Observed advisories are issued when the specified weather condition is occurring and is canceled when the condition no longer exists. **Attachment 5** lists the criteria for weather advisories.

2.9.2. Weather Watch. Weather watches are issued to alert using agencies of the potential for weather conditions of such intensity as to pose a hazard to life or property. Weather watches are generally issued prior to weather warnings and are intended to provide advance notice of potentially significant weather. Weather watches are issued on the potential for the weather condition to occur, and are canceled when the potential no longer exists or upgraded to weather warnings when the potential is determined to be significant enough that protective measures must be taken to protect property and life. **Attachment 6** lists criteria for weather watches.

2.9.3. Weather Warning. A weather warning is a special notice to supported agencies that established weather conditions are occurring or are expected to occur of such intensity as to pose a hazard to life or property. Weather warnings should be considered as more severe than weather advisories. The criteria for weather warnings and the desired lead times are listed in **Attachment 6**.

Chapter 3

MISSION INTEGRATION

3.1. General . This chapter identifies availability of weather products, which are created in support of local flying and non-flying missions.

3.2. Mission Weather Products (MWPs). MWPs refer to mission tailored forecasts produced by the WF in conjunction with the daily flying schedule or other supported unit requirements. MWPs include mission execution forecasts (MEF), flight weather briefings, mission planning briefs and any other weather product produced to meet the needs of the supported unit.

3.2.1. MEF. The MEF is the primary tool used to accomplish day-to-day weather support for Hill AFB flying units. The MEF is developed using the mission execution forecast process (MEFP) identified in AFMAN 15-129V2, and 75 OSS/OSW SOP 3.1. **Figure 3.1.** illustrates the MEFP operational process. During this process the 75 OSS/OSW fuses and tailors weather products with information supplied by local units (e.g., flying schedule). The end result is a product designed to provide timely, accurate, and relevant weather support to customers. The MEF must be consistent with other products issued by 25 OWS and the 557th Weather Wing (557 WW). However, during rapidly changing conditions, emergencies, or when conditions threaten resource protection, the 75 OSS/OSW amends the MEF to accurately reflect conditions and brief 25 OWS when time permits. Forecast specification and amendment criteria are listed in **Attachment 4**.

Figure 3.1. MEFP Operational Process.

1. Obtain Situational Awareness
   a. Identify mission types (e.g., air, ground, change of command, maintenance)
   b. Utilize pre-established procedures (e.g., shift change, shift duty checklist, open/close procedures).
   c. Review applicable products from CUs.
2. Determine "Weather Threat(s) of the Day"
   a. Identify potential threats to mission execution.
   b. Prioritize support based on mission priority and threat to mission execution.
   c. Identify weather products best utilized to mitigate weather impacts.
3. MWP Generation/Dissemination
   a. Conduct appropriate-scale review of global and theater-level products to identify state of the atmosphere affecting a particular mission.
   b. Apply real-time data (e.g., Pilot Reports (PIREPs), radar, satellite imagery, surface observations).
   c. Apply specific forecast techniques (e.g., icing, turbulence, contrails, rules of thumb).
   d. Integrate geographic, terrain, and vegetation influences on the weather and the mission.
   e. Review space weather conditions and effects on the mission.
   f. Generate forecast in proper format employing critical "Go/No-Go" thresholds. Generate Tactical Decision Aid (TDA) output, as required.
   g. Evaluate product for accuracy and disseminate in accordance with established guidelines (e.g., C2 system, LAN/Web Page) to appropriate customers, decision-makers, and other weather units.
   h. Retain MWPs IAW the AF Records Disposition Schedule and AFI 33-364, *Records Disposition - Procedures and Responsibilities*.
4. MISSIONWATCH/Mission Verification
   a. Conduct MISSIONWATCH utilizing real-time weather products at established intervals.
   b. If capability exists, communicate with established POC if thresholds cross critical "Go/No-Go" parameters.
   c. Gather feedback from customers and review weather products as necessary to verify MWP.
   d. Develop forecast review based on established guidelines if necessary.

3.3. 388 FW or 419 FW MEF . As 75 OSS/OSW manning permits, a forecaster is assigned to the 388 FW and 419 FW flying squadrons to perform in-person planning and flight briefings IAW AFI 15-128,. The MEF is designed to provide critical go or no-go weather information to the flying squadron for all phases of each sortie. Weather thresholds are defined by our flying customers and incorporate aircraft, aircrew, mission tactics, and operating location limitations. Aircrews may contact the duty forecaster for updates and clarification pertaining to the MEF. Please refer to **Attachment 4** for specification and amendment criteria. **NOTE:** The MEF is available through the 75 OSS/OSW homepage at the following URL: **https://org.eis.afmc.af.mil/sites/75OSS/OSW/default.aspx**. In the event of a Local Area Network (LAN) outage, the 388 FW or 419 FW MEF is faxed to individual flying units to post at their operations desk.

3.3.1. Issue Times. The MEF is issued based on the flying schedule. It is normally required 15 minutes prior to earliest brief time.

3.3.2. Specification Criteria. The MEF contains the following information, as required:

3.3.2.1. Take-Off and Alternate Weather.

3.3.2.2. Hazards and Winds.

3.3.2.3. Range Weather.

3.3.2.4. Low Level and Air Refueling Weather.

3.3.2.5. Target Acquisition Weather Software (TAWS) Information.

3.4. 514th Flight Test Squadron (514 FLTS) MEF. The 514 FLTS MEF is produced twice daily, Monday – Friday (excluding holidays and family days), to cover the two main flying windows each day, 0830-1130L and 1230-1630L. This MEF is the same as the 388 FW or 419 FW MEF, if available, or created separately, if other local flying does not correspond with the flying windows. Unless otherwise requested, TAWS information is not be included in the 514 FLTS MEF.

3.5. TAWS. The weather flight is capable of providing electro-optic/infrared (EO/IR) information to support specialized weapons systems and other types of special operations equipment. Planning TAWS data is available on the MEF each day the 388 FW or 419 FW has scheduled flying. Detailed mission-specific TAWS products are available on a by-request basis only. Capability exists for infrared, television, or laser sensors. Aircrews requiring detailed support should provide mission input to the 75 OSS/OSW no later than four hours prior to flight mission brief. If specific target acquisition or lock-on ranges are needed, requests must include specific target information, time over target, and weapon type. Operations Security (OPSEC) must be maintained. To enhance mission support, aircrews should provide feedback to the 75 OSS/OSW as to the accuracy and usefulness of the EO/IR information provided via email or telephone to the 75 OSS/OSW.

3.6. UTTR Forecast. The 25 OWS provides daily UTTR forecasts when applicable flying missions are identified (available on the 25 OWS webpage at **https://25ows.us.af.mil/tailored_met/index.cfm?fuseaction=showunit&B_ICAO=KHIF&UNIT_ID=6&BW=H&UF=M&aor=2**). This web page is limited to military users. The UTTR forecast should be used as a pre-brief only. Additional UTTR weather information is available in the daily MEF. Pilots should call the weather technician for a verbal update prior to departure. Additional weather support requirements for activities in the UTTR should be coordinated with the 75 OSS/OSW at least 30 days prior to ensure adequate support can be provided.

3.7. Flight Weather Briefings (FWB). Weather personnel provide a DD Form 175-1, *Flight Weather Briefing*, to aircrew upon request during normal duty hours. Aircrews can receive briefings in person at the weather station, via fax, over phone, or by email. To ensure adequate preparation time, aircrews should notify the duty forecaster the day prior to the briefing whenever possible. Mass briefings for special missions require 24 hours advanced notice, are subject to manning availability, and must be coordinated with weather station leadership. Aircrews receiving faxed or emailed briefings may contact the duty forecaster for any updates or clarification. IAW AFMAN 15-129V2, transient aircrews may receive flight weather briefings, workload, and schedule permitting, from the 75 OSS/OSW. In the event the 75 OSS/OSW is

unable to provide FWB support, contact the 25 OWS by phone, fax or web access to provide the required support. Instructions for contacting the 25 OWS are located at the weather support terminal in the flight planning room of Building 1.

3.8. MISSION WATCH. This is a deliberate process for monitoring terrestrial weather and the space environment for specific mission-limiting environmental factors. This process is accomplished and documented by 75 OSS/OSW personnel for MEFs, FWBs, and verbal weather briefings. Once significant changes to forecasted conditions are identified, 75 OSS WF personnel relay notice of those changing conditions to pertinent customers and amend forecasts as necessary.

3.9. Planning Briefings. Upon request, the Mission Integration Function Noncommissioned Officer in Charge (NCOIC) provides planning briefings for areas within the Continental United States (CONUS) for up to five days. Coordination with requestor is required for planning briefings for areas outside the CONUS or for periods beyond five days.

3.10. Strike Mission Force Support. The 75 OSS maintains and postures two weather forecasters to support 3-Series Aviation Unit Type Code requirements for each Air Combat Command (ACC) flying squadron assigned to Hill AFB that maintain a "Strike Mission" Design Series Force package. Each two person enabler deploys with and provides weather support to each tasked ACC flying squadron.

Chapter 4

STAFF SERVICES

4.1. General. Staff services are typically accomplished by 75 OSS/OSW leadership to include meteorological functions (briefings), ensuring the WF is trained and equipped for day-to-day operations and cultivating relationships with base agencies to ensure support is optimal. The 75 OSS representative acts as the subject matter expert (SME) for incidents involving Chemical, Biological, Radiological, Nuclear and Explosives CBRNE, biological, nuclear, or other hazards to include ensuring appropriate information is passed to pertinent agencies.

4.2. Staff Meteorological Functions. Staff meteorological functions aid leadership in identifying and understanding specific weather and environmental impacts. The WF is available to assist commanders in determining weather support requirements and impacts to operations. Examples of staff meteorological functions provided are:

4.2.1. Staff Weather Briefings. The 75 OSS/OSW present weather briefings as scheduled or upon request. Unscheduled briefings must be requested at least three hours in advance to allow for adequate preparation. Examples of staff briefings include, but are not limited to, 75ABW/CC, 388 FW/CC, and 388 OG/CC stand-ups.

4.2.2. Crisis Action Team (CAT) Briefings. The WF provides weather support for CAT briefings. This includes real-world emergency, exercise, and deployment briefings. Briefings are tailored to provide the appropriate weather intelligence required by participating units.

4.2.3. Emergency Operations Center (EOC) Support. The WF provides weather support as required for EOC briefings. This includes real-world emergency, exercise, and deployments briefings. Briefings are tailored to provide the appropriate weather intelligence required by participating units.

4.2.4. Exercise Support and Briefings**.** The 75 OSS/OSW participates, to the fullest extent possible, in Phase I and Phase II exercises conducted by the 75 ABW and 388 FW. At a minimum, this support includes CAT and Concept Briefs.

4.2.5. Instrument Refresher Course (IRC) Briefings. IAW AFMAN 11-210, *Instrument Refresher Program (IRP),* computer based presentations are available for the weather portion of the briefing. If requested, the WF provides a briefer to discuss more detailed local weather effects and impacts. This briefing includes airfield and mission services, WF capabilities, Resource Protection (RP), seasonal and regional weather, and space weather impacts (when applicable).

4.2.6. Climatological Data. There is various climatological information available for most major airfield locations around the world for operational planning purposes only. Historical weather data is also available for Hill AFB. The 75 OSS/OSW is the OPR for any climatological data requests to the 14th Weather Squadron (14 WS) in Asheville, NC. Urgency, complexity of the request and workload dictate the required time to acquire climatological data from the 14 WS.

4.2.7. Hazardous Spills. In the event toxic chemicals are released into the atmosphere on Hill AFB, the 75 OSS/OSW relays current and forecast weather conditions upon request. In

the event toxic chemicals are released into the atmosphere in the vicinity of Hill AFB or the UTTR, the 75 OSS/OSW relays current and forecast weather conditions from the nearest observation site to the Fire Protection Operations Section (75 CEG/CEUF) or the Incident Commander upon request.

4.2.8. Nuclear Fallout Winds. In the event of a nuclear incident, the 75 OSS/OSW provides upper level wind data to 75 CEG/CEUF upon request.

4.3. Reciprocal Support.

4.3.1. General. Mutual support and cooperation are key elements in the 75 OSS/OSWs ability to provide complete and timely weather support to its customers. This section outlines reciprocal support for base agencies and individual unit responsibilities.

4.3.2. HCP:

4.3.2.1. Notifies 75 OSS duty forecaster of accidents, mishaps, or events in which weather or weather service may be involved.

4.3.2.1.1. If significant weather warrants the HCP to issue an Operational Report-3 BEELINE, a copy is e-mailed to the WFC to enable the process of gathering required data for the follow up Operational Report (OPREP).

4.3.2.2. Disseminates WWAs IAW established checklists.

4.3.3. Hill AFB Flying Units:

4.3.3.1. Provide 75 OSS/OSW with flying schedules, to include changes as necessary. Provide 48 hour notice for briefing support during non-traditional flying hours.

4.3.3.2. Pass significant PIREPs to the 75 OSS WF through the PMSV radio, the control tower, or SOF.

4.3.3.3. Provide forecast feedback when possible to include feedback on EO/IR data.

4.3.4. The 775th Civil Engineering Squadron (775 CES):

4.3.4.1. Provides emergency back-up power for weather station operations. Emergency power is generated and supplied to the weather station from the airfield lighting vault, Building 14. 775 CES personnel notify the duty forecaster at least 24 hours before a scheduled change from commercial to emergency power or emergency to commercial power, and 15 minutes prior to an emergency change from commercial to emergency power or emergency to commercial power.

4.3.5. ATC Tower:

4.3.5.1. Performs a Cooperative Weather Watch (CWW) and notifies the duty forecaster of significant changes in the weather including, but not limited to, visibility, ceiling, thunderstorms, lightning, precipitation, and any other weather affecting flight safety.

4.3.5.2. Notifies the WF when they observe tower prevailing visibility decrease to less than, or increase to equal or exceed 4 miles (6000 meters).

4.3.5.3. Reports changes of one or more reportable values to WF when the prevailing visibility at the tower or the surface is less than 4 miles (6000 meters).

4.3.5.4. Informs the weather observing technician with the sector visibility observations, especially from the southern sector to the western sector (surface visibility is obstructed in these quadrants) when visibility is below 3 miles (4800 meters), and sector visibility differs from prevailing visibility by one or more reportable values.

4.3.5.5. Use the lower of either the tower or surface visibility as the prevailing visibility for aircraft operations as required by FAA JO 7110.65V, *Air Traffic Control*.

4.3.5.6. Reports the following to the weather technician if not carried in the observation:

4.3.5.6.1. The onset of precipitation.

4.3.5.6.2. The occurrences of lightning.

4.3.5.6.3. Tornadoes, funnel clouds or changes to the sky condition that may affect the safety of flight.

4.3.5.6.4. PIREPS no later than 5 minutes after receipt per AFI15-128, paragraph 6.3.12.

4.3.5.6.5. Any changing weather conditions observed by ATC personnel that are significantly different than those contained in the most recent weather observation.

4.3.5.7. Notify the WF immediately after a change in the active runway.

4.3.5.8. Report changes in runway light settings when prevailing visibility is equal to or less than 1 mile (1600 meters).

4.3.5.9. Workload permitting, when notified by an aircraft of a failed attempt to contact the WF by means of PMSV; obtain the aircraft's location and altitude, pass the information to 75 OSS/ OSW personnel and relay the weather information back to the aircraft.

4.3.5.10. If continuous RVR reporting is needed during airfield closure hours, 75 OSS/OSW notifies airfield leadership that the RVR system requires the runway lights to be left on to work properly. This is encouraged if the possibility exists for an emergency aircraft divert into the location. **NOTE:** ATC duties take precedence. However, ATC personnel strive to complete the tasks outlined in this letter in a timely manner.

4.3.6. 75 OSS Airfield Management Operations (AM Ops):

4.3.6.1. Disseminates weather watches, warnings, and advisories IAW AM Ops notification checklists during operational hours.

4.3.6.2. Incorporates information into flight information publications.

Chapter 5

WEATHER EQUIPMENT

5.1. JET.

5.1.1. JET Concept of Operations. JET is designated as the single point from which weather personnel disseminate weather products. It automates the way in which weather products are prepared in support of customer missions. The JET Site Manager is designated by the Weather Flight Commander (WFC) to manage the system. JET outage reporting is handled through the 75 OSS/OSW and 557th WW Fielded Systems Support Center (FSSC) at Offutt AFB, NE. 75 OSS/OSW personnel accomplish outage reporting. IAW AFMAN 15-129 V2, in the event the JET server becomes inoperative and information cannot be transmitted or received through the JET portal, telephone or internet backup systems are used.

5.1.2. JET Local Training Process. Training for the JET portal is provided by the 75 OSS/OSW on initial use and as needed after software revisions. Continuing training requirements for operations are the responsibility of each agency utilizing the JET portal. Specialized training requests are coordinated with 75 OSS/OSW.

5.1.3. JET Operational Responsibilities.

5.1.3.1. 75 OSS/OSW. Weather personnel provide weather products through JET as contained in this publication. The JET Site Manager is responsible for overall system management to include being the JET focal point for all agencies, to include interaction, outage reporting, and any special training requests. Anytime there are JET scheduled maintenance outages or software revisions, the JET Site Manager notifies each agency that could be affected to provide necessary training on that revision.

5.1.3.2. JET Users. Users with access to the ".mil" network and a valid common access card (CAC) can access the JET portal as a guest user. The JET portal can be reached by entering the URL for the 25 OWS JET portal below in paragraph 5.1.3.3. Guest users are able to view current sensor data and any WWAs in effect. Units notify the base weather station personnel in case of non-receipt of scheduled weather data or of JET outages. If the problem cannot be resolved locally, 75 OSS/OSW notifies 557 WW customer service desk. During JET outages, 75 OSS/OSW passes WWAs via telephone to agencies listed in **Attachment 3**. To avoid unnecessary delays in relaying critical weather information to aircrew, ATC, and command authorities, units should use the information provided through the JET portal and refrain from routinely contacting the weather station to request information available on the JET portal.

5.1.3.3. JET Access. The JET portal guest user site can be found at **https://owsjet25.us.af.mil/portal/private/Guesthillafb/Sensor**. If this link becomes obsolete, contact the weather station for the most updated web address. The guest portal has limited capability; it does not allow the user to request a DD Form 175-1, *Flight Weather Briefing*. Aircrews wishing to request a 175-1 electronically through the JET portal require a user account which can be requested on the top of the guest portal JET webpage. Automatic email notifications for WWAs require a JET user account.

5.2. FMQ-19. The FMQ-19 equipment measures temperature, dew point, wind, ceiling height, visibility, pressure, precipitation type, precipitation amount in water equivalent, runway visual range, and lightning. There are two full sensors on the north and south end of the runway and an additional wind sensor at the center of the runway.

5.3. Weather Radar. The 75 OSS/OSW uses data from the main Doppler Weather Surveillance Radar (WSR-88D) operated by the National Weather Service (NWS) office in Salt Lake City. The 75 OSS/OSW works with the NWS to ensure operation of the radar meets the needs of both parties. The radar antenna and transmitter are located atop Promontory Point.

JENNIFER HAMMERSTEDT, Colonel, USAF
Commander

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFPD 15-1, *Weather Operations,* 12 Nov 2015

AFMAN 33-363, *Management of Records,* 1 March 2008

AFI 10-229, *Responding to Severe Weather Events,* 20 January 2012

AFI 11-202V3, ACC Supplement 1, *General Flight Rules,* 28 November 2012

AFI 15-128, *Air Force Weather Roles and Responsibilities,* 7 February 2011

AFI 2501, Air Force Emergency Management Program, 19 April 2016

AFMAN 11-210, *Instrument Refresher Program (IRP),* 3 February 2005

AFMAN 15-111, *Surface Weather Observations,* 27 February 2013

AFMAN 15-124, *Meteorological Codes,* 28 February 2013

AFMAN 15-129V1, *Air and Space Weather Operations – Characterization,* 6 December 2011

AFMAN 15-129V2, *Air and Space Weather Operations – Exploitation,* 7 December 2011

Adopted Forms

AF Form 847, *Recommendation for Change of Publication,* 22 Sept 2009

DD Form 175-1, *Flight Weather Briefing,* Oct 2002

Abbreviations and Acronyms

AFI— Air Force Instruction

AFMAN— Air Force Manual

AFMC—Air Force Materiel Command

AFPD—Air Force Policy Directive

AFRC—Air Force Reserve Command

AFRIMS— Air Force Records Information System

AGL— Above Ground Level

AM Ops— Airfield Management Operations

AMOS— Automated Meteorological Observing System

AOL— Alternate Operating Location

ASF— Airfield Services Element

ATC— Air Traffic Control

BWW— Basic Weather Watch

CAC—Common Access Card

CAT— Crisis Action Team

CONUS— Continental United States

COOP— Continuity of Operations

CWW— Cooperative Weather Watch

DLT— Desired Lead Time

ECT— Equivalent Chill Temperature

EM— Emergency Management

EO/IR - Electro-Optics/Infra-Red

EOC—Emergency Operations Center

FITS— Fighter Index of Temperature Stress

FLIP—Flight Information Program

FLTS— Flight Test Squadron

FMQ-19 - Field Meteorological Equipment

FOD—Foreign Object Debris

FSSC— Fielded Systems Support Center

FW— Fighter Wing

FWB— Flight Weather Briefing

HCP— Hill Command Post

IAW— In Accordance With

IFR— Instrument Flight Rules

IMC— Instrument Meteorological Conditions

IRC— Instrument Refresher Course

JET— Joint Environmental Toolkit

LLWS – Low-Level Wind Shear

LOCAL— Local Surface Observation

MEF— Mission Execution Forecast

MEFP— Mission Execution Forecast Process

METAR— Aviation Routine Weather Report

METWATCH— Meteorological Watch

MIF— Mission Integration Function

MISSIONWATCH – Mission-Scale Meteorological Watch

MSL— Mean Sea Level

MWE— Mission Weather Element

MWP— Mission Weather Product

NWS— National Weather Service

NM— Nautical Miles

NWS— National Weather Service

OPR— Office of Primary Responsibility

OPSEC— Operations Security

OWS— Operational Weather Squadron

PIREP— Pilot Report

PMSV— Pilot to Metro Service

RDS— Records Disposition Schedule

RP— Resource Protection

RVR— Runway Visual Range

RVRNO— Runway Visual Range Unavailable

SLC— Salt Lake City

SOF— Supervisor of Flying

SME— Subject Matter Expert

SPECI— Special Weather Report

SWAP— Severe Weather Action Procedures

TAF— Terminal Aerodrome Forecast

TAWS— Target Acquisition Weather Software

UTC— Universal Time Coordination

UTTR— Utah Test and Training Range

WF— Weather Flight

WFC— Weather Flight Commander

WSR—88D - Weather Surveillance Radar

WWA— Watch, Warning, Advisory

Terms

Automated Meteorological Observing System (AMOS)— Any certified Air Force owned and Air Force or Army accredited observing system (i.e., AN/FMQ-19) that has reached initial operating capability.

Basic Weather Watch (BWW)— Conducted from the base weather station by an observer who, because of other duties, cannot monitor the weather continuously. In addition to taking and disseminating required record observations each hour, the BWW program requires that the observer recheck weather conditions at intervals not to exceed 20 minutes.

Cooperative Weather Watch (CWW)— A CWW is established between air traffic control (ATC) and the weather flight. The occurrence of previously unreported weather conditions which could affect flight safety or which could be critical to the safety or efficiency of other local operations and resources is of primary concern.

Desired Lead Time (DLT)— The amount of advance notice a supported agency requires to complete necessary actions prior to the onset of an established weather event.

Eyes Forward— An open and continuous dialogue of communication from the 75 OSS/OSW to the 25 OWS designed to enhance Meteorological Watch processes and to share information about the development of significant meteorological conditions that may put Hill AFB resources at risk.

Joint Environmental Toolkit (JET)— Weather information evaluation and dissemination system. It is designed to consolidate legacy weather systems over the spectrum of weather operations and enhance the war fighter decision process.

Meteorological Watch (METWATCH)— The process of actively comparing observed weather conditions with those forecasted and updating forecasts with the latest information.

Mission Execution Forecast (MEF)— A customized, tactical-level weather product provided by the 75 OSS/OSW for its supported units to conduct military missions.

Mission Execution Forecast Process (MEFP)— The process of establishing meteorological situational awareness and applying environmental characterizations for the parent/host unit's decision cycle. The end result of the MEFP is a MWP.

Mission—Scale Meteorological Watch (MISSIONWATCH) - The deliberate process for monitoring terrestrial weather or the space environment for specific mission-limiting environmental factors.

Mission Weather Product (MWP)—All possible weather products created utilizing the MEFP which are provided to supported units. A MEF is an example of an MWP.

Pilot Report (PIREP)— A report of observed flight weather conditions usually passed to weather personnel through the PMSV radio.

Pilot to Metro Service (PMSV)— An Ultra High Frequency (UHF) radio service (342.3 MHz for Hill AFB) that allows aircrews to contact weather personnel for updated weather conditions and to pass on significant flight weather reports.

Severe Weather— Established weather conditions that are deemed to pose a hazard to flight safety, property or life. Examples include but are not limited to tornadoes, heavy snow and winds greater than 50 knots.

Terminal Aerodrome— The area within a 5 nautical-mile radius of the center point of the Hill AFB runway complex.

Terminal Aerodrome Forecast (TAF)— A 30-hour forecast for cloud layers, prevailing visibility, weather obstructing visibility, surface winds, altimeter setting, and icing and turbulence from the surface to 10,000 ft mean sea level (MSL). Produced and disseminated by the 25 OWS.

Thunderstorm— Atmospheric condition consisting of lightning, thunder, and heavy precipitation. Potential exists for gusty winds, hail, severe turbulence, icing and wind shear.

Severe Thunderstorm— A thunderstorm capable of producing winds 50 knots or greater and/or hail 3/4 inches or greater.

Strong Thunderstorm— A thunderstorm capable of producing winds 35 to 49 knots and/or hail 1/2 inch to less than 3/4 inch.

Vicinity— The area between 5SM and 10SM of the center point of the Hill AFB runway complex.

Weather Advisory— A special message disseminated via JET, which notifies of established weather conditions that require certain protective actions by various base agencies.

Observed Advisory— An observed weather advisory will be issued only when established weather conditions are actually observed to be occurring at the terminal aerodrome. These advisories will be canceled when the conditions are no longer being observed.

Forecast Advisory— A forecast advisory will be issued when an established weather condition is expected to occur. Advisories will be amended, upgraded, or canceled as required to accurately reflect conditions.

Weather Warning— A special message transmitted over JET to highlight established weather conditions that require certain protective actions by various base agencies. A weather warning will be issued when an established weather condition of such intensity as to pose a hazard to flight safety, property, or life is occurring or is expected to occur. Warnings will be amended, upgraded, or canceled as required to accurately reflect conditions. Warnings issued for Hill AFB are for conditions forecast to affect the aerodrome.

Weather Watch— A special message transmitted over JET to advise supported agencies of the potential for an established weather condition to occur. If required, weather watches will be upgraded to weather warnings. Agencies should review required actions.

Attachment 2

SPECIAL (SPECI) AND LOCAL OBSERVATION CRITERIA

A2.1. Ceiling. A ceiling (the height assigned to the lowest broken or overcast layer of clouds which is predominately opaque) forms or dissipates below, decreases to less than or if below, increases to equal or exceeds:

A2.1.1. 10,000 feet (388/419 FW and 514 FLTS)

A2.1.2. 5,000 feet (514 FLTS)

A2.1.3. 3,000 feet

A2.1.4. 2,000 feet

A2.1.5. 1,500 feet

A2.1.6. 1,000 feet

A2.1.7. 800 feet

A2.1.8. 700 feet

A2.1.9. 600 feet (FLIP)

A2.1.10. 500 feet

A2.1.11. 400 feet

A2.1.12. 300 feet (FLIP)

A2.1.13. 200 feet (FLIP)

A2.1.14. 100 feet

A2.2. Sky Condition. A layer of clouds or obscuring phenomena aloft (i.e., smoke) is observed below 600 feet and no layer was reported below this height previously.

A2.3. Visibility. Prevailing visibility is observed to decrease to less than or if below, increases to equal or exceed:

A2.3.1. 5 miles (514 FLTS)

A2.3.2. 3 miles

A2.3.3. 2 miles

A2.3.4. 1 1/2 miles

A2.3.5. 1 1/4 miles

A2.3.6. 1 mile

A2.3.7. 3/4 mile

A2.3.8. 1/2 mile.

A2.4. RVR. Transmit a SPECI for RVR when the following criteria are met:

A2.4.1. RVR for the active runway decreases to less than or if below, increases to equal or exceed:

A2.4.1.1. 6000 feet

A2.4.1.2. 5000 feet

A2.4.1.3. 4000 feet (FLIP)

A2.4.1.4. 2400 feet

A2.4.1.5. 2000 feet

A2.4.1.6. 1600 feet

A2.4.1.7. 1200 feet

A2.4.1.8. 1000 feet

A2.4.1.9. 600 feet

A2.5. Thunderstorm: Transmit a SPECI when:

A2.5.1. A thunderstorm begins (not required if a thunderstorm is currently in progress).

A2.5.2. A thunderstorm ends.

A2.6. Precipitation: Transmit a SPECI when:

A2.6.1. Hail begins or ends.

A2.6.2. Freezing precipitation begins, ends, or changes intensity.

A2.6.3. Ice pellets begin, end or change intensity.

A2.6.4. Any other type of precipitation begins or ends.

A2.7. Wind Shift: Take a SPECI when a wind shift occurs.

A2.8. Tornado, Funnel Cloud, or Waterspout: Take a SPECI when a tornado, funnel cloud or waterspout:

A2.8.1. Is observed.

A2.8.2. Disappears from sight or ends.

A2.9. Squall: Take a SPECI when squalls occur.

A2.10. Aircraft Mishap: Regardless of operating mode, a SPECI will be encoded and disseminated. The remark "ACFT MISHAP" will be appended to the observation form after transmission and will *not* be disseminated locally or long line.

A2.11. Volcanic Ash: When first observed, we will submit a SPECI upon a change in active runway if requested and if operating in Backup mode.

A2.12. Upon Resumption of Observing Services: Take a SPECI within 15 minutes after returning to duty following a break in hourly coverage if a METAR was not filed as scheduled during that 15-minute period.

A2.13. Change in the active runway: Take and disseminate a full element SPECI observation only if specifically requested by a supported agency (such as Tower, Fire Dept etc.). (Only required when in operating in back-up mode).

A2.14. Altimeter Setting: ALSTG observations are taken at an interval not to exceed 35 minutes when there has been a change of 0.01" Hg or more since the last determined ALSTG value. A single element LOCAL or a SPECI taken within the established time interval will meet this requirement. (Only required when in operating in back-up mode)

A2.15. Any other meteorological situation , which in the opinion of the weather personnel, is significant to the safety of aircraft operations or resource protection.

A2.16. Tower visibility: Take and disseminate a full element SPECI, with tower visibility as a remark, when Cooperative Weather Watch (CWW) criteria has been met.

Attachment 3

LOCAL DISSEMINATION PROCEDURES

A3.1. Primary Dissemination Methods. The primary method of local dissemination for observations, terminal aerodrome forecasts, weather WWAs and PIREPS are via JET portal. Electronically developed MEFs, flight weather briefs and staff weather briefings are disseminated via email and over the Hill AFB local area network.

A3.2. Back-up Procedures and Priorities . Back-up procedures and priorities for local dissemination for observations, MEFs, WWAs, special messages, and PIREPS are passed via telephone. Back-up telephone contact is limited to the following agencies:

A3.2.1. Air Traffic Control Tower (Hotline)

A3.2.2. 388 FW Supervisor of Flying (Hotline)

A3.2.3. 388 FW Maintenance (Hotline)

A3.2.4. HCP (Hotline)

A3.2.5. 25 OWS (Hotline)

A3.2.6. AM Ops (Hotline/during weekend outages).

A3.3. Figures A3.1. – A3.5., provides JET Local Dissemination Format Examples.

Figure A3.1. Surface Observation.

Observation

```
SPECI KHIF 281515Z COR AUTO 07003KT 3/4SM R14/5000FT -SN BR VV006 00/00 A2980 RMK AO2A
COR 1518
```

Figure A3.2. TAF.

TAF

```
TAF AMD KHIF 2815/2919 33009KT 1200 -SN BR VV005 620059
  QNH2978INS
  TEMPO 2815/2818 0600 FG VV001
  BECMG 2818/2819 10009KT 4800 -RASN OVC015 620159 QNH2951INS
  BECMG 2902/2903 05005KT 9999 VCSH SCT030 BKN045 610456
  QNH2950INS
  BECMG 2905/2906 14009KT 9999 NSW SCT080 QNH2945INS
  BECMG 2914/2915 14009KT 9000 -RA BKN070 620703 QNH2948INS
  TX07/2823Z TN00/2912Z AMD 281515
```

Figure A3.3. Weather Watch.

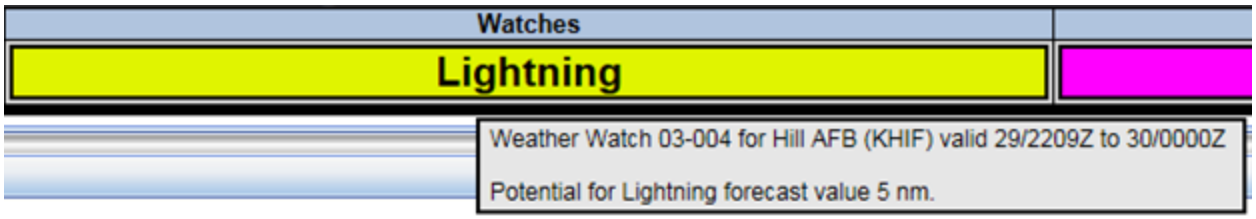


Figure A3.4. Weather Warning.

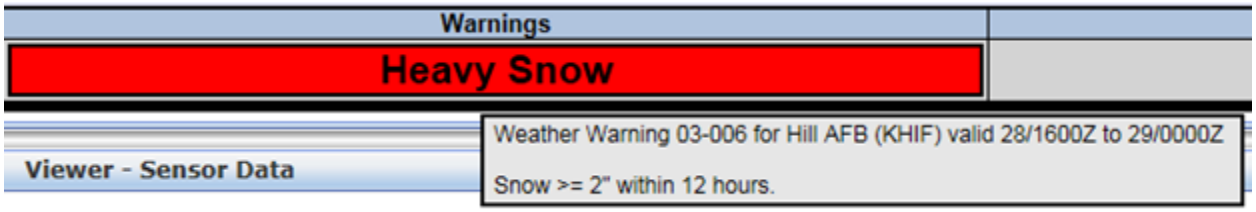
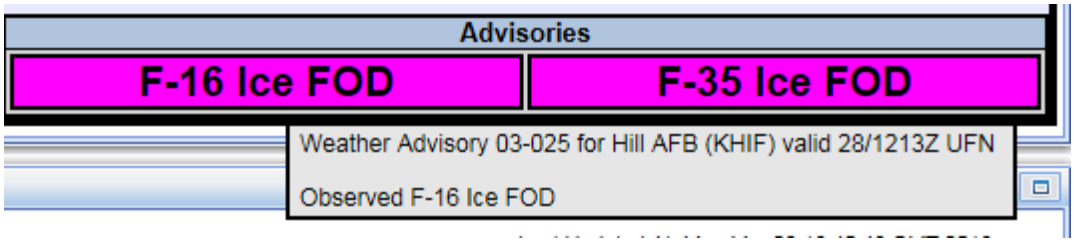


Figure A3.5. Weather Advisory.



Attachment 4

MISSION EXECUTION FORECAST SPECIFICATION/AMENDMENT CRITERIA

A4.1. General. The MEF specifies the expected occurrence, duration, and intensity of the weather conditions listed below. If forecast conditions change, the MEF is amended verbally and posted to the Hill AFB intranet as time permits. An amendment is necessary when any of the following are expected to occur or have occurred and are expected to persist for more than 30 minutes.

A4.2. Ceiling. Ceilings decrease to less than or if below, increase to equal or exceed:

A4.2.1. 10,000 feet

A4.2.2. 5,000 feet

A4.2.3. 3,000 feet

A4.2.4. 1,500 feet

A4.2.5. 700 feet

A4.2.6. 500 feet

A4.2.7. 300 feet

A4.2.8. 200 feet.

A4.3. Visibility. Visibility decreases to less than or if below, increases to equal or exceed:

A4.3.1. 5 statute miles

A4.3.2. 3 statute miles

A4.3.3. 2 statute miles

A4.3.4. 11/2 statute miles

A4.3.5. 1 statute mile

A4.3.6. 1/2 statute mile.

A4.4. Wind. Wind speed change of 10 knots or more, or a direction change of more than 30 degrees when the wind speed (including gusts) is expected to be in excess of 15 knots.

A4.5. Precipitation. When:

A4.5.1. Freezing precipitation begins or ends.

A4.5.2. The beginning or ending of precipitation causes an advisory or warning to be issued, canceled, or amended.

A4.5.3. The occurrence or non-occurrence of precipitation is deemed operationally significant.

A4.6. Thunderstorms. Any thunderstorm activity or change in coverage or duration of thunderstorm activity.

A4.7. Weather Warnings. Warning criterion which occurs or is expected to occur and is not specified in the MEF or was forecasted and is no longer occurring or is no longer expected to occur.

A4.8. Icing or Turbulence. Icing or turbulence of moderate or greater intensity which occurs or is expected to occur and is not specified in the MEF or was forecasted and is no longer occurring or is no longer expected to occur.

A4.9. Low-Level Wind Shear. Low-level wind shear below 2,000 feet AGL not associated with thunderstorms occurs or is expected to occur, and is not specified in the MEF or is forecasted but is no longer occurring or expected to occur.

A4.10. Other. Though not an amendment criterion, a remark special to Hill AFB during winter and transition times is annotated in the MEF. If clouds are expected to be over the north or south end of the runway, the cloud layer is identified in the cloud layer section of the remarks. For example, if Hill AFB is expecting few clouds over the north end of the runway with bases at 500 feet the remark FEW 005 OVR N RWY will be annotated. Also, anytime the forecaster considers the forecast to be unrepresentative.

Attachment 5

WEATHER ADVISORIES

A5.1. Observed Weather Advisories. The duty technician issues and cancels the following observed weather advisories pertinent to flight operations and resource protection over JET. Advisories are valid for the area within a five nautical mile radius of the center of the runway complex unless otherwise specified. The 25 OWS issues applicable Observed Advisories for Hill AFB when the 75 OSS/OSW is closed.

A5.1.1. Observed Lightning Advisory. Issued when lightning is observed within a 10 or 25 nautical mile (NM) radius of the center of the airfield complex. This advisory is superseded when an observed lightning warning is issued or is canceled when lightning has not been observed within 10 and 25 NM for at least 15 minutes.

A5.1.2. Ice FOD Advisory. The Ice FOD Advisory is sent via JET and contains the following message: "Observed ICE FOD conditions exist." The advisory is cancelled when conditions are no longer met. Aircrews and maintenance personnel follow their own locally directed guidance when determining the need to employ anti-icing systems and inlet icing monitors. Issue the observed advisory when any of the following conditions exist:

A5.1.2.1. Dew point is within 9°F (5°C) of ambient temperatures between 25°F (-4°C) and 45°F (7°C) [F-16].

A5.1.2.2. When the ambient temperature is between 20°F (-7°C) and 45°F (7°C) and any precipitation is occurring [F-16].

A5.1.2.3. When the ambient temperature is below 45°F (7°C) and standing water is within the immediate proximity of the engine inlet [F-16].

A5.1.3. Wind Chill Advisory. Issued when the wind chill calculated using the peak gust during the last 15 minutes is less than or equal to -18 degrees Celsius (0 degrees Fahrenheit). This advisory is canceled when conditions are no longer met.

A5.1.4. Low-Level Wind Shear (LLWS) Advisory. Issued when Low Level Wind Shear (LLWS) below 2,000 feet AGL not associated with thunderstorms is occurring based on PIREPs or other observation techniques. This advisory is canceled when conditions are no longer occurring.

A5.1.5. Wind Conditions.

A5.1.5.1. Wind Condition 1. Issued when wind speeds are observed greater than or equal to 30 but less than 40 knots. When the criteria are observed, it is valid for the period of one hour from occurrence. When one hour lapses after the last occurrence, the wind condition is cancelled.

A5.1.5.2. Wind Condition 2. Issued when wind speeds are observed greater than or equal to 40 but less than 50 knots. When the criterion is observed, it is valid for the period of one hour from occurrence. When one hour lapses after the last occurrence, the wind condition is cancelled or downgraded.

A5.1.5.3. Wind Condition 3. Issued when wind speeds are observed greater than or equal to 50 but less than 70 knots. When the criterion is observed, it is valid for the

period of one hour from occurrence. When one hour elapses after the last occurrence, the wind condition is cancelled or downgraded.

A5.1.5.4. Wind Condition 4. Issued when wind speeds are observed greater than or equal to 70 knots. When the criterion is observed, it is valid for the period of one hour from occurrence. When one hour elapses after the last occurrence, the wind condition is cancelled or downgraded.

A5.1.6. Cross Wind Advisory. Issued when cross winds are greater than or equal to 20 knots (F-35 jets) and 25 knots (F-16 jets). Only one Cross Wind Advisory will be in effect at one time. This advisory is canceled when conditions are no longer occurring.

A5.1.7. Fighter Index of Thermal Stress (FITS). FITS CAUTION, and FITS DANGER observed advisories are issued when the combination of dry bulb temperature and dew point temperature enter into FITS value zones found in Attachment 4 of AFI 11-202, Vol 3, ACC Sup 1, *General Flight Rules* (as shown in this publication). Only one FITS observed advisory may be in effect at one time. FITS observed advisories are cancelled when FITS conditions are in the NORMAL zone.

Figure A5.1. FITS Table (Extracted from ACC Supplement).

	Normal Zone				Caution Zone[1]				Danger Zone[2]				Cancel Zone[3]		
	(≤ 90 F)				(91 - 100 F)				(101 - 115 F)				(≥116 F)		
DRY-BULB TEMP	DEW POINT TEMP														
(F)	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
70	74	75	77	79	81	82	84	86	88						
75	78	80	81	83	85	87	88	90	92	94					
80	82	84	85	87	89	91	92	94	96	98	99				
85	86	88	90	91	93	95	97	98	100	102	104	105			
90	90	92	94	96	97	99	101	103	104	106	108	110	111		
95	94	96	98	100	101	103	105	107	108	110	112	114	115	117	
100	99	100	102	104	106	107	109	111	113	114	116	118	120	121	123
105	103	104	106	108	110	111	113	115	117	118	120	122	124	125	127
110	107	109	110	112	114	116	117	119	121	123	124	126	128	130	132
115	111	113	115	116	118	120	122	123	125	127	129	130	132	134	136
120	115	117	119	120	122	124	126	127	129	131	133	134	136	138	140

Attachment 6

WEATHER WATCHES AND WARNINGS

A6.1. Weather Watches . Weather watches are issued on the potential for the weather condition to occur, and are canceled when the potential no longer exists or is upgraded to weather warnings when the potential is significant enough that protective measures must be taken to protect property and life. Weather watches have defined begin and end times. Watches are valid for the area within a 5 NM radius of the center of the runway complex.

Table A6.1. Weather Watch Criteria and Desired Lead Times.

#	Weather Criteria	Desired Lead Time
1	Tornado	As potential warrants
2	Severe Winds ≥ 50 knots	As potential warrants
3	Severe Hail ≥ ¾ inch	As potential warrants
4	Freezing Precipitation	As potential warrants
5	Lightning within 5 nm	30 min
6	Heavy Snow (≥ 2 inches in 12hrs)	As potential warrants

A6.2. Weather Warnings. Weather warnings are issued when the potential for established weather criteria is significant enough that protective measures must be taken to protect property and life. Warnings are valid for the area within a 5NM radius of the center of the runway complex. Weather warnings are forecasts issued prior to the onset of the expected condition. The exception to this is the lightning observed within 5NM warning. When lightning is actually observed within a 5NM radius of the center of the airfield complex (i.e., visual sighting by weather observer, forecasters, tower personnel, ramp personnel, lightning detection system, WSR-88D Doppler Radar, or other reliable sources), this observed warning would be issued. This warning is canceled when it has been at least 15 minutes since any of the above criteria was last met.

Table A6.2. Weather Warning Criteria and Desired Lead Times.

#	Weather Criteria	Desired Lead Time
1	Tornado	30 min
2	Severe Winds ≥ 50 knots	60 min
3	Winds ≥ 35 but < 50 knots	60 min
4	Hail ≥ ¾ inch	60 min
5	Hail ≥ ½ inch but < ¾ inch	60 min
6	Freezing Precipitation	60 min
7	Heavy Snow (≥ 2 inches in 12hrs)	120 min
8	Heavy Snow (≥ 6 inches in 12hrs)	120 min
9	Lightning within 5 nautical miles	As Observed
NOTE: Watches and warnings specify size, strength, or amounts expected, as applicable.		

Attachment 7

WEATHER FLIGHT STANDBY AND RECALL

A7.1. Weather Flight Standby. The 75 OSS/OSW maintains a certified standby weather technician at all times during weather flight closure. The 25 OWS alerts the 75 OSS/OSW standby technician of issued WWAs during WF closure. The standby weather technician remains in the local area in order to respond to the following conditions:

A7.1.1. Weather watch or warning for hail $\geq$ 3/4 inch

A7.1.2. Weather watch or warning for a Tornado

A7.1.3. Wind condition 3 or 4 ($\geq$ 50-69 kts or $\geq$ 70 kts)

A7.1.4. Weather watch or warning for surface winds $\geq$ 50 kts

A7.1.5. Weather watch or warning for freezing precipitation

A7.1.6. Weather watch or warning for snowfall $\geq$ 6 inches within 12 hours

A7.1.7. Anytime the fighter squadrons are alerted for mission

A7.1.8. Anytime there is a network, JET or FMQ-19 Outage

Attachment 8

NOTIFICATION MATRIX

A8.1. The base is notified via Giant Voice for the following warnings:

A8.1.1. Tornado.

A8.1.2. **(Hail > ¾")** .

A8.1.3. Severe Winds >=50kts).

A8.1.4. Lightning Observed (within 5nm).

A8.1.5. Freezing Precipitation.

Figure A8.1. Notification Matrix units notified by HCP* denotes after duty hours notification.

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r
A			X															
B			X															
C		X	X				X	X	X*	X*	X*	X*	X*	X	X*		X*	X
D			X															
E			X															
F			X															
G			X				X	X*		X*		X*		X			X*	X
H			X*				X	X*	X*	X*		X*		X		X*	X*	X
I	X*	X*	X*				X	X*	X*	X*		X*		X		X*	X*	X
J	X*	X*	X*				X	X*	X*	X*		X*		X	X*	X*	X*	X
K																		
L																		
M	X*	X*	X					X*		X*		X*		X		X*	X*	
N	X*	X*	X					X*		X*		X*		X		X*	X*	
O	X*	X*	X					X*		X*		X*		X		X*	X*	
P	X	X*	X					X*	X*	X*	X*	X*	X*	X	X*	X	X	
Q	X*	X*	X*							X*		X*		X		X*	X*	
R	X*	X*	X*							X*		X*		X		X*	X*	
S	X*	X*	X*	X*	X*	X*	X	X*	X*	X*	X*	X*		X	X*	X*	X*	X
T	X*	X*	X*	X*	X*	X*	X	X*	X*	X*	X*	X*		X		X*	X*	X
U	X*	X*	X*	X*	X*	X*		X*	X*	X*	X*	X*		X		X*	X*	X
V	X*	X*	X*	X*	X*	X*		X*	X*	X*	X*	X*		X		X*	X*	X
W	X		X*					X*	X*	X*	X*	X*		X		X*	X*	X
X	X	X	X				X	X*	X*	X*	X*	X*	X*	X	X*	X	X*	X
Y	X	X*	X	X*	X*	X	X		X*	X*	X*	X*		X		X*	X*	X
Z	X*	X*	X							X*		X*		X		X*	X*	
AA	X*	X*	X							X*		X*		X		X*	X*	

Table A8.2. Weather Advisories, Watches and Warnings

Weather Advisory	Weather Watch	Weather Warning
A. Ice FOD (F-16)	**M.** Tornado	**S.** Tornado
B. FITS (Fighter Index of Thermal Stress, Caution or Danger)	**N.** Severe Winds (≥ 50 kts)	**T.** Hail > ¾"
C. Wind Chill (< 0 Fahrenheit)	**O.** Hail > ¾"	**U.** Severe Winds(≥ 50 kts)
D. Low-Level Wind Shear	**P.** Lightning within 5 NM	**V.** Hail > ½" < ¾"
E. Crosswinds (≥ 20 kts)	**Q.** Snow ≥ 2" In 12 Hours	**W.** Strong Winds (35-49 kts)
F. Crosswinds (≥ 25 kts)	**R.** Freezing Precipitation	**X.** Lightning Observed (within 5 NM)
G. Wind Condition 1 (30-39 kts observed)		**Y.** Freezing Precipitation
H. Wind Condition 2 (40-49 kts observed)		**Z.** Snow ≥ 2" In 12 Hours
I. Wind Condition 3 (50-69 kts observed)		**AA.** Snow ≥ 6" In 12 Hours
J. Wind Condition 4 (≥ 70 kts observed)		
K. Lightning Observed within 10NM		
L. Lightning Observed within 25NM		

Note: Weather Advisory. Weather advisories are special notices to supported agencies that established weather conditions, for which they may have to take protective actions, are occurring or are expected to occur.
Note: Weather Watch. Weather watches are issued to alert using agencies of the potential for weather conditions of such intensity as to pose a hazard to life or property.
Note: Weather Warning. A weather warning is a special notice to supported agencies that established weather conditions are occurring or are expected to occur of such intensity as to pose a hazard to life or property.

Table A8.3. Agencies to be notified.

AGENCY	DUTY HOURS	NON-DUTY HOURS
a. 75 ABW/CC	H/L, 777-7500	Key Personnel
b. 75 MSG/CC	777-7503	Key Personnel
c. 388 FW/SE	H/L, 777-3402 During Flying Hours Only	Standby
d. 388 FW/CC	H/L	Key Personnel
e. 388 OG/CC	H/L	Key Personnel
f. 388 MXG/CC	H/L	Key Personnel
g. AFPAA	777-0894	N/A
h. Warrior Fitness Center	777-2761	N/A
i. 75 SFS (ECC)	H/L, 777-3058	24 Hr Agency
j. 75 ABW/MU	777-6868/6818	N/A
k. ATOC	777-3088	N/A
l. CMCC	H/L, 777-4320	H/L, 7-4320
m. Vehicle Ops	777-1843	24 Hr Agency
n. AFTC/SMO	586-7910	Treaties Binder
o. 75 ABW/SC	586-TECH	N/A
p. 75 CEG	H/L, 777-3988	Standby
q. 729 ACS	777-0666/0676	777-0666/801-564-2005
r. CDC	777-6223	N/A

Attachment 9

AIRCRAFT AND GROUND SUPPORT SENSITIVITES AND ACTIONS TAKEN BY CUSTOMERS

A9.1. Supported Unit Requirements. Thoroughly understanding customer needs is critical in determining weather support requirements and subsequently providing the support. This attachment provides mission-limiting terrestrial and space weather parameters and requirements as well as unit mission descriptions for supported and local flying units.

A9.2. 388 FW, 419 FW, 514 FLTS (AFRC), and 309th Maintenance Wing (309 MXW) (AFMC Depot).

A9.2.1. Mission: The 388 FW and 419 FW maintain and operate F-16 and F-35 aircraft. The 309 MXW performs Programmed Depot Maintenance (PDM) on F-22, F16, F-35, A-10s and C-130s. The 514 FLTS performs "flight check" tests on 309 MXW aircraft.

A9.2.2. Weapon Systems or Resource Assets:

A9.2.2.1. Aircraft: F-22, F-35, F-16A/B/C/D, A-10, C-130.

A9.2.2.2. Weapons: Weather will support the full range of customer munitions.

A9.2.3. Mission-limiting Weather Parameters:

A9.2.3.1. Space: Global Positioning System (GPS) correction.

A9.2.3.2. Weather Support Requirements. Electronic MEF, updates of WWA criteria, phone contact with SOF, and in-person briefings prior to step during inclement weather.

A9.2.3.3. Terrestrial Restrictions and Requirements:

Table A9.1. Takeoff Restrictions.

AIRCRAFT	TAKEOFF	REQIRED MINIMUMS	IMPACT	FORECAST SUPPORT
F-16 F-35	Single Ship	Cig/Vis Cat V 1500/3 Cat IV 700/2 Cat III 500/ 1 1/2 Cat II 300/1	No Go if less than 300/1 or less than pilot category	Forecast at takeoff time
F-16 F-35	Single Ship	CIG/VIS 2000/3 (KHIF) 1000/2 (Alt AFLD)	CIG/VIS of 2000/3 at KHIF requires an alternate. The alternate airfield must have CIG/VIS of 1000/2 or it's a No Go	Forecasts at KHIF and all alternates
F-16 F-35	Formation	Cig/Vis Cat V 1500/3 Cat IV 700/2 Cat III 500/ 1 1/2 Cat II 300/1	No Go if less than 300/1 or less than pilot category	Forecast at takeoff time
F-16 F-35	Single Ship	Cig/Vis 10,000/5	Functional Check Flights are No Go	Augment OBS for CIG/VIS until above 10,000/5
F-16 F-35	Single Ship	Sustained Surface Wind ≥ 35kts	No Go if sustained winds are occurring or forecast to occur ≥35kts	None
F-16	Single Ship	Crosswind ≥ 25kts with dry runway ≥ 20kts with wet runway ≥ 10kts with icy runway	No Go	None
F-16	Formation	Crosswind ≥ 15kts*	No Go	None
F-35	Single Ship	Crosswind ≥ 20kts dry or wet runway	No Go	None
F-35	Formation	Crosswind ≥ 10kts*	No Go	None
F-35	Single Ship	Standing Water on Runway ≥ 0.10”	No Go if 0.10” standing water on runway (determined by Base Ops)	None
*No F-16/F-35 formation takeoffs if runway is wet, subject to SOF discretion				

Table A9.2. Landing Restrictions.

AIRCRAFT	LAND	REQIRED MINIMUMS	IMPACT	FORECAST SUPPORT
F-16 F-35	Single Ship	Cig/Vis Cat V 1500/3 Cat IV 700/2 Cat III 500/ 1 1/2 Cat II 300/1	Divert if less than 300/1 or less than pilot category	Current observation at land time
F-16 F-35	Single Ship	CIG/VIS 2000/3 (KHIF) 1000/2 (Alt AFLD)	CIG/VIS of 2000/3 at KHIF requires an alternate. The alternate airfield must have CIG/VIS of 1000/2 or it's a No Go	Forecasts at KHIF and all alternates
F-16 F-35	Formation	Cig/Vis Cat V 1500/3 Cat IV 700/2 Cat III 500/ 1 1/2 Cat II 300/1	Divert if less than 300/1 or less than pilot category	Forecast at Landing field or if possible divert field
F-16 F-35	Single Ship	Sustained Surface Wind ≥ 35kts	No Go if sustained winds are occurring or forecast to occur ≥ 35kts	None
F-16	Single Ship	Crosswind ≥ 25kts with dry runway ≥ 20kts with wet runway ≥ 10kts with icy runway	Divert or hold	None
F-16	Formation	Crosswind ≥ 15kts*	Divert or hold	None
F-35	Single Ship	Crosswind ≥ 20kts dry or wet runway	Divert or hold	None
F-35	Formation	Crosswind ≥ 10kts*	Divert or hold	None
*No F-16/F-35 formation landings if runway is wet, subject to SOF discretion				

Table A9.3. Route Ceilings/Visibility Restrictions.

AIRCRAFT	ROUTE	REQIRED MINIMUMS	IMPACT	FORECAST SUPPORT
F-16 F-35	 IR VR	Cig/Vis 3000/5 3000/5	May alter plans	Clouds/Wx SFC-100; Emphasis on mid-level clouds

Table A9.4. Mission Restrictions (Air-To-Ground).

AIRCRAFT	REQIRED MINIMUMS	IMPACT	FORECAST SUPPORT
F-16 F-35	Cig/Vis 1500/3 Day 1500/5 Night	May alter mission	Range forecasts and observations

Table A9.5. Mission Restrictions (Air-To-Air).

AIRCRAFT	REQIRED MINIMUMS	IMPACT	FORECAST SUPPORT
F-16 F-35	Clear horizon at flight level and 2,000ft clear air space	May alter mission	Cloud bases, tops, and weather

Table A9.6. Other Possible Mission-Impacting Weather Parameters.

PARAMETER	IMPACT
Terminal aerodrome forecast less than 3000/3 (including tempo group)	Alternate required
Terminal aerodrome or area forecast for icing, freezing precipitation, turbulence, or thunderstorms	May alter mission/plan

Table A9.7. Aircraft Maintenance Requirements.

WX ELEMENT CRITERIA/ADVISORY/WARNING	MISSION IMPACT
Lightning within 25NM	F-35 Test and Evaluation (T&E) NO GO, aircraft (A/C) & EQUIPMENT DAMAGE, PERSONNEL SAFETY: Evacuate non-essential personnel from flight line. Ground A/C. Ensure A/C canopies & panels are closed.
Lightning within 10NM	- Evacuate non-essential personnel from flight line - Install grounding wires to all parked aircraft - Ensure aircraft canopies and panels are closed
Lightning within 5NM	- Perform above actions - All maintenance will cease, equipment and tool kits secured, and personnel removed from the flight line
Hail >= 1/2 Inch	- Ensure radomes and canopies are closed and secured on parked aircraft - Hangar as many aircraft as possible - Flight line maintenance terminated
Freezing precipitation	- Ensure radomes and canopies are closed and secured on parked aircraft - Minimize vehicle movement
Snow greater than 2 in 12 hours	- Heads up for planning
Ice FOD	- Inlet monitors required -Shut engines down if ice is observed and remove ice accumulation/ inspect intakes after removal
Wind Condition I (30-40kts)	- Fold TPS-75 antennas/729 ACS - Ensure radomes and canopies are closed and secured on parked aircraft - Chalk and tie down aircraft
Wind Condition II (41-49kts)	- Same as Wind Condition I
Wind Condition III (50-70kts)	- Same as Wind Condition I, II - Ensure aircraft requiring mooring are moored - Remove miscellaneous items that can't be secured
Wind Condition IV (above 71kts)	- Same as Wind Condition I, II, & II - Moor aircraft - Consider hangar of all aircraft and evacuating personnel
Wind Chill -30F or less	- Suspend outside work on flight lines
Low visibility	- Minimize vehicle movement - Ensure radomes and canopies are closed and secured on parked aircraft - At discretion of Pro Supers, discontinue loading, unloading and/or handling of munitions - Minimize munitions movement

A9.3. 75 ABW.

A9.3.1. Mission: Provides the installation with traditional military services, to include civil engineering, personnel, logistics, communications, planning and strategic management, computer, medical, security, recreational services, munitions, and all other host services.

A9.3.2. Weapon Systems or Resource Assets:

A9.3.2.1. Aircraft: N/A.

A9.3.2.2. Weapons: Munitions Storage Area consisting of a wide spectrum of munitions.

A9.3.2.3. Other Resources and Assets: Facilities, equipment and personnel on Hill AFB. Specifically, activate monitoring, possible evacuation, and snow removal from roofs of 800 series buildings.

A9.3.3. Mission-limiting Weather Parameters:

A9.3.3.1. Terrestrial: Thunderstorms, lightning, winds, hail and snowfall.

A9.3.3.2. Space: None.

A9.3.4. Weather Support Requirements: Briefs Hill AFB CAT, Installation Control Center, EOC, and 75 ABW staff meetings upon request.

Attachment 10

SAMPLE MISSION EXECUTION FORECAST (MEF)

Figure A10.1. SAMPLE MISSION EXECUTION FORECAST (MEF),